WHAT IS CLAIMED IS:

1.   An error correction method for performing error correction for data to which error correction data have been added, the method comprising:

5   selecting a first error correction algorithm from a plurality of error correction algorithms having different correction strengths;

           employing the selected first error correction algorithm to perform error correction for the data;

10   determining whether or not the first error correction algorithm is capable of correcting errors in the data;

           selecting a second error algorithm from the plurality of error correction algorithms when it is determined that the first error correction algorithm is not capable of

15   correcting errors in the data; and

           employing the selected second error correction algorithm to perform error correction for the data.

2.   The error correction method as claimed in claim 1, wherein the selecting of the second error correction

20   algorithm comprises selecting an error correction algorithm in which the correction strength is greater than that in the first error correction algorithm.

3.   The error correction method as claimed in claim 1, wherein the selecting of the second error correction

25   algorithm comprises selecting the first error correction

algorithm as the second error correction algorithm.

4.   The error correction method as claimed in claim 1, wherein the selecting of the second error correction algorithm comprises selecting the second error correction algorithm based on error correction results obtained when the error correction is performed using the first error correction algorithm.

5.   The error correction method as claimed in claim 1, wherein the selecting of the second error algorithm comprises selecting an error correction algorithm in which the correction strength level is higher than that in the first error correction algorithm.

6.   The error correction method as claimed in claim 1, wherein the performing of the error correction using the first error correction algorithm and the performing of the error correction using the second error correction algorithm comprise repeating the error correction for data, respectively.

7.   The error correction method as claimed in claim 1, wherein the performing of the error correction using the first error correction algorithm and the performing of the error correction using the second error correction algorithm comprise performing the error correction for each predetermined block forming a plurality of rows and a plurality of columns, respectively, and

wherein the performing of the error correction for the predetermined block comprises either performing the error correction in the direction of the rows, or performing the error correction in the direction of the columns.

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8.   The error correction method as claimed in claim 1, wherein the performing of the error correction using the second error correction algorithm comprises performing the error correction for new data that have been obtained,

10   instead of the data for which the error correction has been performed using the first error correction algorithm.

9.   The error correction method as claimed in claim 1, further comprising storing an error correction algorithm in which used for error correction for the data.

15   10.   An error correction apparatus for performing error correction for data to which error correction data have been added, comprising:

an error correction unit configured to perform error correction for the data using a first error correction

20   algorithm that has been selected from among a plurality of error correction algorithms having different correction strengths;

a determination unit configured to determine whether or not the error correction for the data using the first

25   error correction algorithm is capable; and

a controlling unit configured to select a second error correction algorithm from the plurality of error correction algorithms and to control the error correction unit to perform error correction using the second error correction algorithm, for the data in which determined that the error correction using the first error correction algorithm is incapable.

11. The error correction apparatus as claimed in claim 10, wherein the controller selects an error correction algorithm in which the correction strength is greater than that in the first error correction algorithm.

12. The error correction apparatus as claimed in claim 11, wherein the controller selects the first error correction algorithm as the second error correction algorithm.

13. The error correction apparatus as claimed in claim 10, wherein the controller selects the second error correction algorithm based on the error correction results obtained when the error correction is performed using the first error correction algorithm.

14. The error correction apparatus as claimed in claim 10, wherein the controller selects an error correction algorithm in which the correction strength level is higher than that in the first error correction algorithm.

25 15. The error correction apparatus as claimed in claim

10, wherein the error correction unit repeats the error correction for the data using the first error correction algorithm or the second error correction algorithm.

16.   The error correction apparatus as claimed in claim 10, wherein the error correction unit employs the first error correction algorithm and the second error correction algorithm to perform the error correction for each predetermined block forming a plurality of rows and a plurality of columns.

17.   The error correction apparatus as claimed in claim 10, wherein the error correction unit performs the error correction for new data that are obtained, instead of for the data for which the error correction has been performed using the first error correction algorithm.

18.   The error correction apparatus as claimed in claim 10, wherein the error correction unit stores an error correction algorithm in which used for error correction for the data.

19.   An error correction program product for causing a computer system to execute procedures for performing error correction for data to which error correction data have been added, the program product comprising:

a unit for selecting a first error correction algorithm from a plurality of error correction algorithms having different correction strengths;

a unit for employing the selected first error correction algorithm to perform error correction for the data;

a unit for determining whether or not the first error correction algorithm is capable of correcting errors in the data;

a unit for selecting a second error algorithm from the plurality of error correction algorithms when it is determined that the first error correction algorithm is not capable of correcting errors in the data; and

a unit for employing the selected second error correction algorithm to perform error correction for the data.